SEQUENCE LISTING

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TECH CENTER 1600/2900



<110> Reinl, Stephen Lindbo, John Turpen, Thomas

<120> CREATION OF VARIABLE LENGTH AND SEQUENCE LINKER REGIONS FOR DUAL-DOMAIN OR MULTI-DOMAIN MOLECULES

<130> 42205

<140> 09/667,237

<141> 2000-09-22

<150> US 60/155,978

<151> 1999-09-24

<160> 51

<170> PatentIn Ver. 2.1

<210> 1

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Glycine rich
linker

<400> 1

Pro Gly Ile Ser Gly Gly Gly Gly

<210> 2

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Asparagine
 rich linker

<400> 2

Asn Asn Asn Asn Asn Asn Asn Asn Asn Leu Gly Ile Glu Gly Arg

1 5 10 15

<210> 3

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: (Gly4-Ser)3

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<400> 3
Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser
<210> 4
<211> 30
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: VH domain
      forward primer
<400> 4
                                                                   30
gtggcatgca ggttcaactg gtggagtctg
<210> 5
<211> 26
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: VH domain
      reverse primer
<220>
<223> "asy" can appear from 1 to 50 times before the
      remainder of the sequence
<400> 5
                                                                   26
asytgaggag acggtgacca gggttc
<210> 6
<211> 41
<212> DNA
<213> Artificial Sequence
<223> Description of Artificial Sequence: VH domain
      reverse primer, first reaction
asyasyasya syasyasytg aggagacggt gaccagggtt c
                                                                   41
<210> 7
<211> 50
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: VH domain
      reverse primer, second reaction
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<4.00> 7 asyasyasya syasyasyas yasyasytga ggagacggtg accagggttc	50
<210> 8 <211> 29 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: VL domain forward primer	
<220> <223> "rst" can appear from 1 to 50 times before the remainder of the sequence	
<400> 8 rstgacattc agatgaccca gtctccttc	29
<210> 9 <211> 39 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: VL domain reverse primer	
<400> 9 caccctaggc tatcgtttga tcagtacctt ggtcccctg	39
<210> 10 <211> 44 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: VL domain forward primer, third reaction	
<400> 10 rstrstrstr strstrstga cattcagatg acccagtctc cttc	44
<210> 11 <211> 53 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: VL domain forward primer, fourth reaction	
<400> 11	

rstrstrstr strstrstrs trstrstgac attcagatga cccagtctcc ttc	53
<210> 12 <211> 39 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Linker region nucleotide sequence	·
<400> 12 actactgcta ctggtgctag tactactgct ggtgctagt	39
<210> 13 <211> 13 <212> PRT <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Linker region amino acid sequence	
<400> 13 Thr Thr Ala Thr Gly Ala Ser Thr Thr Ala Gly Ala Ser 1 5 10	
<210> 14 <211> 39 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Linker region nucleotide sequence	
<400> 14 gctactgctg ctagtggtgc tgctgctggt ggtggtact	39
<210> 15 <211> 13 <212> PRT <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Linker region amino acid sequence	
<400> 15 Ala Thr Ala Ala Ser Gly Ala Ala Ala Gly Gly Gly Thr 1 5 10	

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<210> 16
<211> 39
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Linker region
      nucleotide sequence
<400> 16
                                                                    39
gctactggtg ctagtactag tgctactgct ggtggtagt
<210> 17
<211> 13
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Linker region
      amino acid sequence
<400> 17
Ala Thr Gly Ala Ser Thr Ser Ala Thr Ala Gly Gly Ser
                  5
<210> 18
<211> 39
<212> DNA
<213> Artificial Sequence
<223> Description of Artificial Sequence: Linker region
      nucleotide sequence
                                                                    39
 agtactgctg ctggtactag tagtggtagt agtactggt
 <210> 19
 <211> 13
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> Description of Artificial Sequence: Linker region
       amino acid sequence
 <400> 19
 Ser Thr Ala Ala Gly Thr Ser Ser Gly Ser Ser Thr Gly
 <210> 20
 <211> 51
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<212> DNA

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<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Linker region
      nucleotide sequence
<400> 20
gctagtactg ctactagtag tggtggtggt ggtactggta gtagtgctgc t
                                                                  51
<210> 21
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Linker region
      amino acid sequence
<400> 21
Ala Ser Thr Ala Thr Ser Ser Gly Gly Gly Thr Gly Ser Ser Ala Ala
                                     10
                 5
Ala
<210> 22
<211> 60
<212> DNA
<213> Artificial Sequence
<223> Description of Artificial Sequence: Linker region
      nucleotide sequence
gctactagta ctgctgctgc tggtgctact agtgctactg gtggtgctag tggtactggt 60
 <210> 23
 <211> 20
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> Description of Artificial Sequence: Linker region
       amino acid sequence
 <400> 23
 Ala Thr Ser Thr Ala Ala Ala Gly Ala Thr Ser Ala Thr Gly Gly Ala
                                                           15
                   5
 Ser Gly Thr Gly
```

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<210> 24
<211> 39
<212> DNA
<213> Artificial Sequence
<223> Description of Artificial Sequence: Linker region
      nucleotide sequence
<400> 24
                                                                    39
actggtgcta gtggtgctac tagtagtggt agtagtagt
<210> 25
<211> 13
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Linker region
      amino acid sequence
<400> 25
Thr Gly Ala Ser Gly Ala Thr Ser Ser Gly Ser Ser Ser
<210> 26
<211> 31
<212> DNA
<213> Artificial Sequence
<223> Description of Artificial Sequence: VH domain
      forward primer
<400> 26
                                                                    31
cctgcatgct ggaggtgcag ttggtggaat c
<210> 27
<211> 23
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Description of Artificial Sequence: VH domain
       reverse primer
 <220>
 <223> "asy" can appear from 1 to 50 times before the
       remainder of the sequence
 <400> 27
                                                                    23
 asyagaggag acggtgacca tga
```

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<210> 28
<211> 32
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: VH domain
      reverse primer, first reaction
<400> 28
                                                                   32
asyasyasya syagaggaga cggtgaccat ga
<210> 29
<211> 47
<212> DNA
<213> Artificial Sequence
<223> Description of Artificial Sequence: VH domain
      reverse primer, second reaction
                                                                    47
asyasyasya syasyasyas yasyasyaga ggagacggtg accatga
<210> 30
<211> 22
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: VL domain
      forward primer
<220>
<223> "rst" can appear from 1 to 50 times before the
      remainder of the sequence
<400> 30
                                                                    22
rstcagtctg ccctgactca gt
<210> 31
<211> 34
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: VL domain
      reverse primer
<400> 31
                                                                    34
caccctaggt caaccaagga cggtcaggtt ggtc
```

```
<211> 37
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: VL domain
      forward primer, first reaction
                                                                    37
rstrstrstr strstrstca gtctgccctg actcagt
<210> 33
<211> 46
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: VL domain
      forward primer, second reaction
<400> 33
rstrstrstr strstrstrs trstrstcag tctgccctga ctcagt
                                                                    46
<210> 34
<211> 15
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Linker region
      nucleotide sequence
<400> 34
                                                                    15
ggtgctggtg gtggt
<210> 35
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
 <223> Description of Artificial Sequence: Linker region
       amino acid sequence
 <400> 35
 Gly Ala Gly Gly Gly
   1
 <210> 36
 <211> 30
 <212> DNA
 <213> Artificial Sequence
```

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<220>
<223> Description of Artificial Sequence: Linker region
     nucleotide sequence
<400> 36
                                                                   30
actggtggtg gtggtggtag tggtggtggt
<210> 37
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Linker region
      amino acid sequence
<400> 37
Thr Gly Gly Gly Gly Ser Gly Gly Gly
<210> 38
<211> 36
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Linker region
      nucleotide sequence
<400> 38
                                                                   36
actactacta ctgctactac tgctggtagt ggtgct
<210> 39
<211> 12
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Linker region
      amino acid sequence
<400> 39
Thr Thr Thr Ala Thr Thr Ala Gly Ser Gly Ala
                  5
  1
<210> 40
<211> 15
<212> DNA
<213> Artificial Sequence
<223> Description of Artificial Sequence: Linker region
```

nucleotide sequence

```
<400> 40
                                                                   15
gctactactg gtgct
<210> 41
<211> 5
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Linker region
      amino acid sequence
<400> 41
Ala Ser Thr Gly Ala
 1
<210> 42
<211> 24
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Linker region
      nucleotide sequence
<400> 42
                                                                    24
agtactggta gtagtggtgc tggt
<210> 43
<211> 8
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Linker region
      amino acid sequence
<400> 43
Ser Thr Gly Ser Ser Gly Ala Gly
                  5
  1
<210> 44
<211> 21
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Linker region
      nucleotide sequence
<400> 44
                                                                    21
gctagtagtg gtgctagtgc t
```

```
<210> 45
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Linker region
      amino acid sequence
<400> 45
Ala Ser Ser Gly Ala Ser Ala
                  5
 1
<210> 46
<211> 39
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Linker region
      nucleotide sequence
<400> 46
                                                                   39
gctagtggtg gtactgctgg tactggtggt agtagtact
<210> 47
<211> 13
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Linker region
      amino acid sequence
<400> 47
Ala Ser Gly Gly Thr Ala Gly Thr Gly Gly Ser Ser Thr
                  5
<210> 48
<211> 51
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Linker region
      nucleotide sequence
<400> 48
                                                                   51
actagtggta gtggtgctag tgctgctgct ggtggtgctg ctgctagtgc t
```

<210> 49

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<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Linker region
      amino acid sequence
Thr Ser Gly Ser Gly Ala Ser Ala Ala Gly Gly Ala Ala Ser
Ala
<210> 50
<211> 24
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Duplex with
      bubble, upper sequence
<400> 50
                                                                  24
rstrstrstr strstrstca tgcc
<210> 51
<211> 24
<212> DNA
<213> Artificial Sequence
<223> Description of Artificial Sequence: Duplex with
      bubble, lower sequence
<400> 51
ggcatgasya syasyasyas yasy
```

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